WHAT IS CLAIMED IS:

1. A ring laser gyro comprising two or more ring lasers, said ring lasers being optically independent of each other, wherein:

a change in beat frequency with respect to a change in angular velocity of a first ring laser is opposite to that of a second ring laser; and

angular velocity of rotation of said gyro is detected by a signal representing a difference between a first beat frequency generated by said first ring laser and a second beat frequency generated by said second ring laser.

2. A ring laser gyro according to claim 1, wherein said beat frequency generated by said first ring laser and said beat frequency generated by said second ring laser in a static state are equal to each other, and the rate of said change in said beat frequency with respect to said change in said angular velocity of said first ring laser is equal to that of said second ring laser.

3. A ring laser gyro according to claim 1, wherein, when angular velocity in a direction is increased, frequency of an impedance change with respect to said first ring laser is decreased, while frequency of an impedance change with respect to said

second ring laser is increased.

4. A ring laser gyro according to claim 1, wherein

said two ring lasers have a tapered portion in a part of their respective optical waveguides;

said tapered portion is formed of a first portion where width of said optical waveguide becomes larger along a propagation direction of a clockwise laser beam and a second portion where width of said optical waveguide becomes smaller; and,

in said first semiconductor ring laser, said first portion is longer than said second portion, while, in said second semiconductor ring laser, said second portion is longer than said first portion.

5. A ring laser gyro according to any one of claims 1 to 4, wherein ratio of area surrounded by a resonator to length of a revolution of said resonator in said first ring laser is equal to that in said second ring laser.

6. A ring laser gyro according to claim 1, wherein shapes of resonators of said first and second ring lasers are mirror images of each other.

7. A ring laser gyro according to claim 1,

wherein said planes nonperpendicular to each other are planes in parallel with each other.

8. A ring laser gyro according to claim 7, wherein said planes in parallel with each other are one plane.

9. A ring laser gyro according to claim 1, wherein said planes nonperpendicular to each other, said planes in parallel with each other, or said one plane are/is surfaces/a surface of semiconductor substrates/a semiconductor substrate.

10. A ring laser gyro according to claim 1, wherein said planes nonperpendicular to each other, said planes in parallel with each other, or said one plane are/is other than surfaces/a surface of semiconductor substrates/a semiconductor substrate.

11. A ring laser gyro according to claim 1, wherein:

said semiconductor ring laser gyro comprises an absorber or a light-shield for preventing optical coupling between said two ring lasers; and

said absorber or said light-shield does not return reflected light to said ring lasers.

12. A method of driving a semiconductor gyro ring laser according to claim 1, wherein:

said two semiconductor ring lasers are respectively driven at constant current and a voltage change is detected from said electric terminals.

13. A method of driving a semiconductor ring laser gyro according to claim 1, wherein:

said two semiconductor ring lasers are respectively driven at constant voltage and a change in drive current is detected from said electric terminals.

14. A method of driving a ring laser gyro according to claim 12 or 13, wherein current injected to or voltage applied to said two ring lasers is the same.

15. A method of processing a signal from a ring laser gyro according to claim 1, wherein:

calculating processing is carried on the basis of said frequency of said impedance change in said two respective semiconductor ring lasers to obtain said angular velocity and rotational direction.

16. A method of processing a signal from a ring laser gyro according to claim 15, wherein said operation is subtraction or negatively weighted

average.

17. A method of processing a signal from a ring laser gyro according to claim 16, wherein said weight corresponds to a ratio of said beat frequencies in said static state in said ring lasers.

18. A method of processing a signal from a ring laser gyro according to claim 16, wherein a ring laser gyro according to claim 1 is driven, said calculating processing is carried out based on said frequencies of said impedance change in said respective semiconductor ring lasers, and drive conditions are controlled using the result of said calculating processing.

19. A method of processing a signal from a ring laser gyro according to claim 18, wherein said calculating processing is addition or weighted average.

20. A method of processing a signal from a ring laser gyro according to claim 19, wherein said weight in said weighted average corresponds to a ratio of length of a revolution of said ring resonator to area surrounded by said ring resonator between said respective ring resonators.